National Transportation Safety Board NTSB ID: DEN02TA078 Aircraft Registration Number: N6271N FACTUAL REPORT Occurrence Date: 07/21/2002 Most Critical Injury: None AVIATION Occurrence Type: Accident Investigated By: NTSB Location/Time Nearest City/Place State Zip Code Local Time Time Zone CO 80112 1537 MDT Englewood Distance From Landing Facility: Direction From Airport: Airport Proximity: On Airport Aircraft Information Summary Aircraft Manufacturer Model/Series Type of Aircraft Cessna 182R Airplane

Sightseeing Flight: No Air Medical Transport Flight: No

Narrative

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

On July 21, 2002, at 1537 mountain daylight time, a Cessna 182R, N6271N, owned and operated by the Civil Air Patrol (CAP), was substantially damaged during a hard landing at Centennial Airport, Englewood, Colorado. The pilot-in-command (PIC), a safety pilot (SP), and a pilot rated-passenger serving as a scanner escaped injury. Day visual meteorological conditions prevailed, and no flight plan had been filed for the public use cross-country flight being operated under Title 14 CFR Part 91. The flight originated from Canon City, Colorado, approximately 1455.

The following is based on an accident report submitted by the PIC, a CAP mission check pilot. As the flight neared its destination, the SP obtained Centennial Airport's ATIS (automatic terminal information service) information Papa that indicated the wind was from 030 degrees at 9 knots, with gusts to 15 knots. The SP then contacted Denver approach control and requested a practice ILS (instrument landing system) approach to runway 35R. The PIC was vectored to intercept the localizer just outside Casse LOM (compass locator outer marker). The initial approach was made using 10 degrees of flaps and 90 KIAS (knots indicated airspeed). After glideslope capture, flaps were lowered to 20 degrees and speed was reduced to 80 KIAS. Throughout the approach, the airplane was flown "1-2 dots above the glide slope." At decision height, the PIC removed his foggles (vision restricting device) and transition to a visual approach. He reduced power slightly to facilitate his descent, slowed to 75 KIAS, and flared. "Apparently a slight gust occurred," he wrote, and the nose rose slightly. He added a little power and held the attitude. The airplane descended "very rapidly" and the pilot thought he pulled back on the control yoke to arrest the descent. The airplane landed hard, bounced, and came down "very hard" on the nose wheel. He applied full power and the airplane began drifting to the left of the runway. The SP "requested" and took control of the airplane and returned it to the runway centerline (in the CAP report, the SP said, "I've got it," the PIC said, "You got it," and the SP took control of the airplane). When the airplane touched down, it veered to the left, departed the runway, and skidded to a halt.

The following is based on the accident report submitted by the SP, a CAP mission pilot. The SP said the approach was normal, and the airplane touched down and bounced. "The bounce didn't seem too bad or unusual," the SP wrote, but the airplane climbed "a lot in a very nose high attitude (like a bad balloon)." Then the ground came up "really fast followed by a very hard impact." There was "only runway visible in the windshield." The airplane became airborne again as engine power was increased and it drifted over the grass on the left side of the runway. The PIC and the SP "had a positive exchange of the controls." She thinks the PIC said, "You got it?" and the SP replied, "I got it." The SP maneuvered the airplane back over the runway and made a crosswind landing, touching down on the right wheel first. When the left wheel touched, the airplane veered to the left, skidded onto the grass, and came to an "abrupt" halt.

The safety pilot included with her statement a diagram showing the point where the airplane touched down, propeller strike marks in the asphalt, and the point where the airplane went off the side of the runway. Also included were CAP Form 104, Mission Flight Plan/Briefing Form, and COWG Form 1,

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Narrative (Continued)
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Aircraft Flight Record. Both forms listed the pilot-in-command and passengers.

The Civil Air Patrol conducted its own investigation of the accident and made available copies of those statements submitted by the pilots and witnesses, and a sketch of the mishap site.

In addition the left main, nose gear, and propeller damage, the firewall was buckled and the left wing leading edge was crushed.

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AVIATION	AVIATION Occurrence Type: Accident											
Landing Facility/Approach In	formation	•					•					
Airport Name		,	Airport ID:	Airport Eleva	tion	n Runway Used Ru			Runway Length		Runway Width	
Centennial	APA	5883 Ft	. MSL	. 35R 10			10002		100			
Runway Surface Type: Asphalt		•		•				•				
Runway Surface Condition: Dry												
Type Instrument Approach: ILS-co	omplete; Practice											
VFR Approach/Landing: Straight-	 in											
VIIV. pprodoty Editaling. Ottalight												
Aircraft Information									i			
Aircraft Manufacturer Cessna			Model	/Series						Number 67815		
Airworthiness Certificate(s): Norm	 nal											
Landing Gear Type: Tricycle												
Homebuilt Aircraft? No	Certifie	Certified Max Gross Wt. 3100 LBS						er of En	ngines: 1			
Engine Type: Reciprocating			Engine Manufacturer: Model/Series: Lycoming O-540-L3C5D							Rated Power: 235 HP		
- Aircraft Inspection Information			-	-								
Type of Last Inspection			Date of Last Inspection Time Since Last Inspec				ection	ection Airframe Tota			al Time	
Annual			06/2002 33					33 Ho	Hours 3822 Hour			322 Hours
- Emergency Locator Transmitter (ELT) Information											
ELT Installed? Yes	ELT Operat	ed? Yes	3		ELT	Aided	in Locating A	ccident S	ite? No)		
Owner/Operator Information												
Registered Aircraft Owner			Street A	Address 105 S. H	lamse	ell St.						
Civil Air Patrol			City Maxwell AFB								- 1	Zip Code 36112
			Street A		ALD					AL		30112
Operator of Aircraft					Reg'	d Aircr	aft Owner					
Same as Reg'd Aircraft Owner				City Maxwell AFB							- 1	Zip Code 36112
Operator Does Business As:				0	perator Desig	nator Co	de:					
- Type of U.S. Certificate(s) Held: I	None					-						
Air Carrier Operating Certificate(s)	:											
Operating Certificate:				Operator (Certific	ate:		_				
Regulation Flight Conducted Unde	r: Public Use											
Type of Flight Operation Conducted	d: Public Use							_				
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AVIATION				Occurrence Type: Accident										
First Pilot Information														
Name						City	State					Date of Birt	h	Age
On File		On File	File On File On File							63				
Sex: M	Seat Occupied:			С	ertifica	ite Num	ber: On File)	•					
Certificate(s): Commercial														
Airplane Rating(s): Single-engine Land														
Rotorcraft/Glider/LTA: None														
Instrument F	Rating(s): Airpl	ane												
Instructor Ra	ating(s): None	Э												
Type Rating	/Endorsement fo	or Accident/In	cident Aircra	ft?			С	urrent Bier	nial Flight	Revie	w? 04/	2002		
Medical Cer	t.: Class 2	Medica	al Cert. Statu	s: Valid Med	dicalw/ wa	ivers/lim	١.		Date of	_ast M	ledical E	Exam: 01/20	002	
- Flight Time	e Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Night		Inst Actual	rument Simulated	d	Rotorcraft	Glider		Lighter Than Air
Total Time		1099	632	1099			58	40	40 1					
Pilot In Com	mand(PIC)	1036	630	1036			51 3		36 160					
Instructor							_			_			\dashv	
Last 90 Days		27	16	30			3			3				
Last 30 Days		7	6	7			2			1			\dashv	
Last 24 Hou		1	1	1		 		Jan Darfa			T _o	in normal Dilatio		
Seatbelt Use	ed? Yes	Shou	lder Harness	Used? Yes		110	OXICO	logy Perfo	rmea? No		5	econd Pilot?	Yes	i
Flight Plar	n/Itinerary													
	ht Plan Filed: Co	ompany VFI	 R											
Departure P		, , , , , , , , , , , , , , , , , , ,				Ts	State	Air	Airport Identifier Departu		arture Time	Т	ime Zone	
Canon City							1V6			1455			MDT	
Destination							State	Air	nort Idontif	ior				
	Accident/Incide	nt Location					olale		Airport Identifier					
Type of Clea	Type of Clearance: VFR													
Type of Airspace: Class D														
Weather I	nformation													
Source of Briefing:														
Unknown														
Method of E	Briefing: Unkno	wn												
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Weather Information													
WOF ID	Observation Time	Time Zone	WOF Elevati	on	WOF Distance From Accident Site						n Accident Site	ent Site	
APA	1553	MDT	5883 Ft.	. MSL				NM			Deg.	Mag.	
Sky/Lowes	st Cloud Condition: Few	: Few 9000 Ft. AGL Condition of Light: Day											
Lowest Ce	Lowest Ceiling: None Ft. AGL Visibility: 10 SM Altimeter: 30								30.13	"Hg			
Temperatu	ure: 29 °C [Dew Point:	8 °C	°C Wind Direction: 50 Density Altitude: 8509						8509	Ft.		
Wind Spee	ed: 12	Gusts:		Weath	ner Condti	ons at Acc	cident S	ite: Visual C	ond	itions			
Visibility (R	RVR): Ft.	Visibility (RV	/V)	SM	Intensity	of Precip	itation:						
Restriction	ns to Visibility: None												
Type of Pre	ecipitation: None												
Accident	Information												
Aircraft Dar	mage: Substantial		Aircraft Fire	e: None	;			Aircraft Exp	losio	n None			
Classificati	ion: U.S. Registered/U.	S. Soil											
- Injury Sur	mmary Matrix	Fatal Seri	rious Mino	or	None	TOTAL							
First Pi	ilot				1		1						
Second	d Pilot				1		1						
Studen	nt Pilot						7						
Flight I	nstructor						7						
Check	Pilot						7						
Flight E	Engineer						7						
Cabin /	Attendants						7						
Other C	Crew						7						
Passen	ngers				1		1						
- TOTAL /	ABOARD -				3		3						
Other G	Ground						7						
- GRAND	O TOTAL -				3		3						

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Investigator-In-Charge (IIC)

Arnold W. Scott

Additional Persons Participating in This Accident/Incident Investigation:

John J Muldoon Aviation Safety Inspector - Airworthiness FAA Flight Standards District Office 26805 E. 68th Ave., Suite 200 Denver, CO 80249